



**GLUTEN
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GROUP**



Gluten Sensitivity and FODMAPs

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Gluten sensitivity and FODMAPs: Is there a connection?

Non-celiac gluten sensitivity (also known as gluten sensitivity) is not yet well understood. The currently accepted means of diagnosing this condition is to rule out celiac disease, wheat allergy, and other possible causes of symptoms. Then, if a gluten-free diet leads to improvement in symptoms, gluten sensitivity may be diagnosed.

Should FODMAPs be considered one of these “other possible causes of symptoms”? Limited research suggests this may sometimes be the case. Some individuals who believe they have gluten sensitivity and experience an improvement in IBS (irritable bowel syndrome)-like symptoms when on a gluten-free diet may be benefitting from reduced consumption of FODMAPs rather than from elimination of gluten. It has been concluded in some research that gluten may not be a trigger of GI symptoms in some individuals once FODMAPs have been reduced.

Here's where overlap exists between a low-FODMAP diet and a gluten-free diet: the gluten-containing grains wheat, rye and barley also happen to be high-FODMAP foods. (It is the type of carbohydrates in these foods, however, not the gluten protein, which makes them high FODMAP.) So, when these foods are eliminated on a gluten-free diet, this source of FODMAPs is also reduced.

What are FODMAPs?

FODMAP stands for **F**ermentable-**O**ligosaccharide-**D**isaccharide-**M**onosaccharide-**A**nd-**P**olyols. Essentially, FODMAPs are certain types of sugars and shorter chain carbohydrates. They are found in a broad range of foods, including some items from each of the following categories: fruits, vegetables, nuts, seeds, grains and grain-based products, dairy and dairy alternatives, sugars and sweeteners.

The low FODMAP diet was developed in 1999 by Dr. Sue Shepherd at Monash University in Australia to control gastrointestinal symptoms associated with irritable bowel syndrome (IBS). Low digestibility of FODMAPs means they are poorly absorbed in the small intestine and therefore proceed to the large intestine, where they are fermented by bacteria. This leads in some people to IBS-like symptoms including gas, bloating, abdominal discomfort, pain and altered bowel function. Some evidence indicates that reducing intake of FODMAPs provides relief to approximately 75% of individuals experiencing IBS-like symptoms. Many foods are sources of FODMAPs and it is important that a low FODMAP diet be well planned to ensure that it provides sufficient nutrients. Generally, the low FODMAP diet is followed strictly for a period of two to six weeks. This is followed by re-introduction of some foods to determine which specific FODMAP sources are problematic for each particular individual.

Individuals interested in considering a low FODMAP diet should consult with their personal healthcare provider, and with a dietitian who has specific knowledge of this diet and of food intolerances. In addition, it should be determined in consultation with a healthcare provider whether other testing and/or treatment is indicated, which may include testing for celiac disease.

References

- Barrett JS, Gibson PR. Fermentable oligosaccharides, disaccharides, monosaccharides and polyols (FODMAPs) and nonallergic food intolerance: FODMAPs or food chemicals? *Therap Adv Gastroenterol*. 2012 July; 5(3) 261-268
- Biesiekierski JR, Peters SL, Newnham ED, Rosella O, Muir JG, Gibson PR. No Effects of Gluten in Patients With Self-Reported Non-Celiac Gluten Sensitivity After Dietary Reduction of Fermentable, Poorly Absorbed, Short-Chain Carbohydrates. *J Gastro*. 2013; 145 -2.
- Gibson PR, Shepherd SJ. Evidence-based dietary management of functional gastrointestinal symptoms: The FODMAP approach *J Gastroenterol Hepatol*. 2010 Feb;25(2):252-8. doi: 10.1111/j.1440-1746.2009.06149.x.
- Halmos EP, Power VA, Shepherd SJ, Gibson PR, Muir JG. A diet low in FODMAPs reduces symptoms of irritable bowel syndrome. *J Gastro*. 2014 Jan;146(1):67-75.e5. doi: 10.1053/j.gastro.2013.09.046. Epub 2013 Sep 25.
- Low FODMAP Diet. Published 2014. Accessed March 28, 2014.<http://shepherdworks.com.au/disease-information/low-fodmap-diet>.
- The Monash University Low FODMAP Diet. Monash University. Published 2010. Updated January 8, 2013. Accessed March 21, 2014. <http://www.med.monash.edu/cecs/gastro/fodmap/description.html>
- Shepherd S. (2014, March 26). Is Gluten Really the Problem? The Role of FODMAPs in Gluten-Related Disorders. Live webinar, hosted by NFCA, now Beyond Celiac. <https://www.beyondceliac.org/SiteData/docs/NFCAFODMAP/1c0d8d5674bb8c9c/NFCA%20FODMAPs%202014%20Webinar%203.26.14.pdf>
- Skodie GI, et al. Fructan, Rather Than Gluten, Induces Symptoms in Patients With Self-Reported Non-Celiac Gluten Sensitivity. *Gastroenterology*. 2018 Feb;154(3):529-539.e2. doi: 10.1053/j.gastro.2017.10.040. Epub 2017 Nov 2.

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Advances in celiac disease and gluten-related disorders are fast-paced. If this document is more than 2 years old, please visit our website for updated documents.

This information should not be used to diagnose or treat gluten-related disorders or other medical conditions. For questions about these conditions consult your healthcare team when considering this information.

Please consider your local GIG support group as another resource.

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The Mission of the Gluten Intolerance Group is to empower the gluten-free community through consumer support, advocacy, and education.

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